



Dallas Fort Worth International Airport

The Airport Cooperative Research Program

Executive Overview



A Briefing To FAA Southwest Region Airport Division
2008 Partnership conference

March 11, 2008



Origins of the ACRP



- **The ACRP was authorized as part of the Vision 100-Century of Aviation Reauthorization Act**
- **October 2005, the FAA executed a contract with the National Academies, acting through its Transportation Research Board (TRB), to serve as manager of the ACRP**
- **Program oversight and governance are provided by representatives of airport operating agencies**

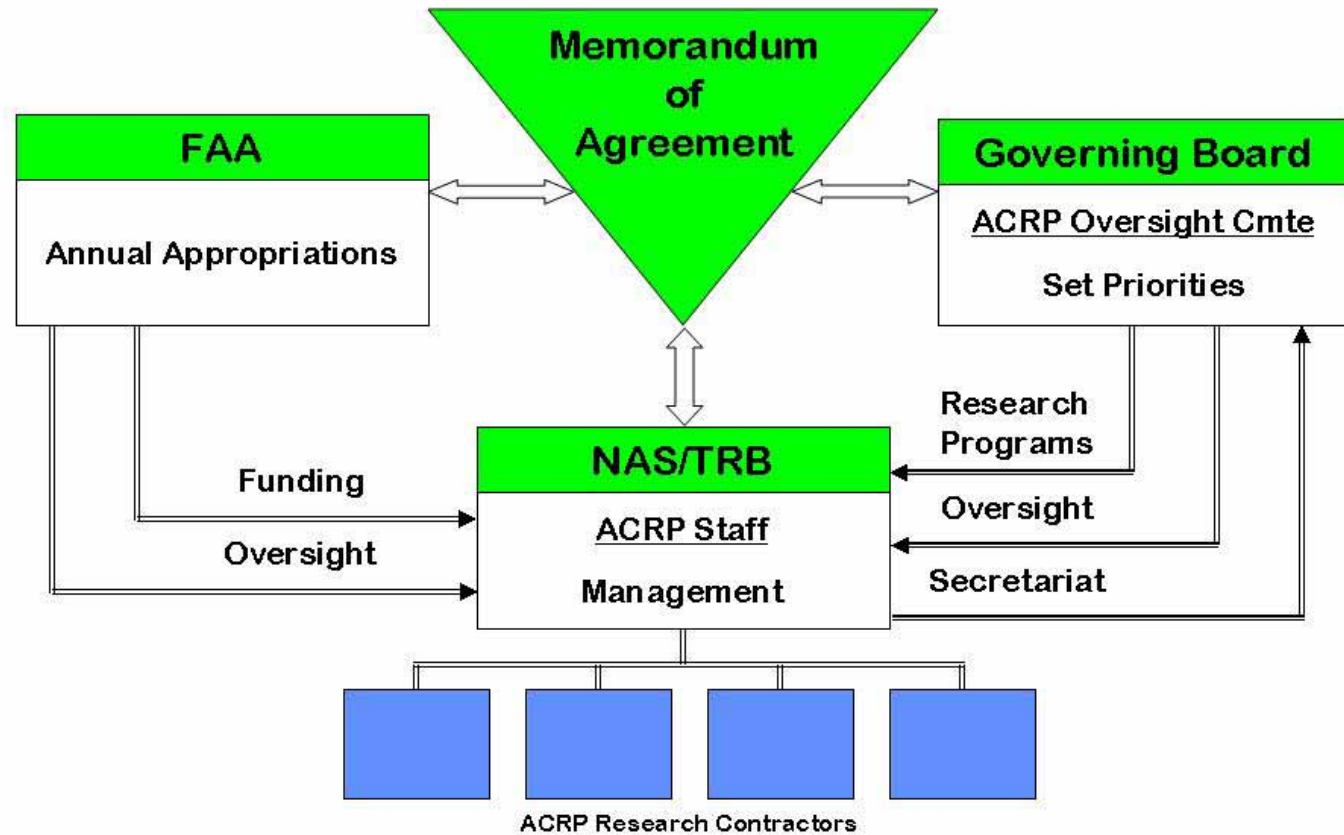


Finances:

- \$10 mil. FY08, \$ 15 mil. FY09 . . .
- Source of funding AIP

Governance:

- Administered by the Transportation Research Board with Federal Sponsor being FAA
- ACRP Board
 - ACI nominates 10 (6 large, 2 medium, 2 small)
 - NASAO nominates 4 (2 nonhub/GA, 2 states)
 - AAEE nominates 2 (1 nonhub, 1 GA)
 - ATA nominates 1
 - Air travel consumer group nominates 1
 - FAA, TSA, EPA, NASA nominate 1 each



Airports are where:

- **Aviation connects with other transport modes.**
- **Federal responsibility for air traffic operations intersects state/local responsibility for providing airports.**
- **National goals for aviation efficiency meet federal, state, and local concerns over noise and environmental quality.**
- **National air transportation security commitment must be implemented with help of airport and airport users.**



Changes and Opportunities in Aviation



- **New institutions (TSA, DHS)**
- **Many new expectations and responsibilities for airports and federal agencies.**
- **New, unanticipated problems and conflicts emerging.**
- **Need for continuing means for airports, federal agencies, airports users, and others in industry to work together in identifying and solving problems.**
- **Revolution in Airline Business Model, Security Enhancements, Technology Capabilities**

Opportunity for:

- Airports to address shared research needs without duplication of effort
- Airports and airlines to work together on shared problems (e.g., aircraft/airport compatibility)
- Airports and federal agencies to work together on common issues (e.g., balancing noise, environmental, air traffic control, capacity and efficiency)
- All to work together on finding ways to strengthen and integrate security--build it into design standards, operating procedures, etc.



Success of Cooperative Research Program in Highways and Transit



What makes them work? Responsive, Credible, Timely

- *Governed* by operators with the active participation of federal agencies, users, and industry.
- *Financed* with revenues derived from users--compelling research focused on pressing needs, producing useable results, and gaining strong sense of ownership by implementers.
- *Managed* to ensure that research products are high caliber, objective, timely (1 to 3 yr), accessible to users; guided from start-to-finish by technical experts and practitioners.

- **Serve as focal point for identifying and prioritizing research needs**
- **Set annual research agenda**
- **Define project funding levels and articulate desired products**
- **Coordinates with other research programs**
- **Monitor program direction and results**
- **Ensures dissemination of results**

- **Report to Congress on value/effectiveness of program**

- **Intangible: Brings diverse groups together on a regular basis**



Basics of Highway and Transit Cooperative Research Programs



- Directed and programmed cooperatively by operators and industry
- Emphasis on applied research--shared problems neglected by other research programs
- Complementary to federal research programs
- Multi-disciplinary, work performed by contractors: \$200K to \$500K, 2-3 yr projects
- Overseen and peer reviewed by panels of volunteers who are technical experts and practitioners
- Results are user-oriented: guidelines, syntheses, evaluation methods, handbooks
- TRB is program manager

Distribution of Projects and Syntheses by Research Field Through December 31, 2007

<u>Research Fields</u>	<u>Number of Projects</u>	<u>Number of Syntheses</u>
1. Administration	8	1
2. Environment	10	2
3. Policy and Planning	14	3
4. Safety	6	2
5. Security	1	0
6. Human Resources	1	0
7. Design	6	0
8. Construction	0	0
9. Maintenance	1	1
10. Operations	6	3



ACRP Products



- **Types of Research Conducted**
 - Synthesis of present-day practices/methods
 - Best Practices Manuals
 - Data Capture and Reporting
 - Cost Benefit Analyses of Comparative Approaches/Technologies

Project Examples

- **Innovative Airport Financing and Revenue Sources**
 - Synthesis 1:
 - Innovative Finance and Alternative Sources of Revenue for Airports
- **Airport Safety management Systems**
 - Report 1, Volume 1
 - Safety Management Systems for Airports: Overview
- **Energy Use in U.S. Airports**
 - Research Results Digest 2
 - Model for Improving Energy Use in U.S. Airport Facilities
- **Airport Planning**
 - Synthesis 2: Airport Aviation Activity Forecasting
 - Synthesis 4: Counting Aircraft operations at Non-towered Airports



Upcoming Events



- Problem Statement Solicitations January 15th
- Problem Statements Deadline April 1st
- Problem Statement Announcements August 7th
- Panel Solicitation August 8th
- Panel Nominations Due September 15th
- Commence Projects November 11th

- **Participating in the ACRP**
 - Identifying Research Needs
 - Participating on Panels: 1-2 days travel @ of 3 trips over an 18 mth time period, with all expenses paid by ACRP
 - Conducting Research: \$300k - \$500k + per project
 - Making Use of ACRP Research: applied solutions



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